

## SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services  
Div of Environmental Health, 11 SHS  
(207) 287-5872 Fax: (207) 287-4172

## PROPERTY LOCATION

&gt;&gt; CAUTION: LPI APPROVAL REQUIRED &lt;&lt;

City, Town, or Plantation LANOINE  
Street or Road 57 COVE ROAD  
Subdivision, Lot # TOWN TAX MAP 14, LOTS 22+23Town/City LANOINE Permit # 1763  
Date Permit Issued 6/9/15 Fee: \$ 250 Double Fee Charged [ ]  
Local Plumbing Inspector Signature [Signature] L.P.I. # 1040

## OWNER/APPLICANT INFORMATION

Name (last, first, MI) ELLIS, JOHN ☒ Owner ☐ Applicant  
Mailing Address of 57 COVE ROAD  
Owner/Applicant LANOWE, ME 04005  
Daytime Tel. # (207) 667-5458

The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # 14 Lot # 23

## OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

## CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application  
(1st) date approved

Signature of Owner or Applicant

Date

Local Plumbing Inspector Signature

(2nd) date approved

## PERMIT INFORMATION

## TYPE OF APPLICATION

- 1 First Time System  
☒ 2 Replacement System  
Type replaced 20 x 60'  
Year installed: STONE BED  
3 Expanded System  
a. <25% Expansion  
b. ≥25% Expansion  
4 Experimental System  
5 Seasonal Conversion

## THIS APPLICATION REQUIRES

- 1 No Rule Variance  
2 First Time System Variance  
a. Local Plumbing Inspector Approval  
b. State & Local Plumbing Inspector Approval  
☒ 3 Replacement System Variance  
a. Local Plumbing Inspector Approval  
b. State & Local Plumbing Inspector Approval  
4 Minimum Lot Size Variance  
5 Seasonal Conversion Permit

## DISPOSAL SYSTEM COMPONENTS

- 1 Complete Non-engineered System  
2 Primitive System (graywater & alt. toilet)  
3 Alternative Toilet specify: \_\_\_\_\_  
4 Non-engineered Treatment Tank (only)  
5 Holding Tank, \_\_\_\_\_ gallons  
☒ 6 Non-engineered Disposal Field (only)  
7 Separated Laundry System  
8 Complete Engineered System (2000 gpd or more)  
9 Engineered Treatment Tank (only)  
10 Engineered Disposal Field (only)  
11 Pre-treatment, specify: \_\_\_\_\_  
12 Miscellaneous Components

## SIZE OF PROPERTY

2+/- SQ. FT.  
ACRES

## DISPOSAL SYSTEM TO SERVE

- ☒ 1 Single Family Dwelling Unit, No. of Bedrooms: 3  
2 Multiple Family Dwelling, No. of Units: \_\_\_\_\_  
3 Other: \_\_\_\_\_ (specify)  
Current Use Seasonal ☒ Year Round ☐ Undeveloped

## TYPE OF WATER SUPPLY

- EXISTING  
☒ 1 Drilled Well 2 Dug Well 3 Private  
4 Public 5 Other

## SHORELAND ZONING

☒ Yes ☐ No

## DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

## TREATMENT TANK

- EXISTING  
☒ 1 Concrete  
a Regular  
b Low Profile  
2 Plastic  
3 Other: \_\_\_\_\_  
CAPACITY 1000 GAL.

## DISPOSAL FIELD TYPE &amp; SIZE

- ☒ 1 Stone Bed 2 Stone Trench  
3 Proprietary Device  
a cluster array c Linear  
b regular load d H-20 load  
4 Other: \_\_\_\_\_  
SIZE: 1140 sq. ft. in ft.

## GARBAGE DISPOSAL UNIT

- ☒ 1 No 2 Yes 3 Maybe  
If Yes or Maybe, specify one below:  
a multi-compartment tank  
b tanks in series  
c increase in tank capacity  
d Filter on Tank Outlet

## DESIGN FLOW

270 gallons per day  
BASED ON:  
☒ 1 Table 4A (dwelling units)  
2 Table 4C (other facilities)  
SHOW CALCULATIONS for other facilities

## SOIL DATA &amp; DESIGN CLASS

PROFILE B CONDITION C  
at Observation Hole # TPI  
Depth 17"  
of Most Limiting Soil Factor

## DISPOSAL FIELD SIZING

- 1 Medium--2.6 sq. ft. / gpd  
2 Medium---Large 3.3 sq. ft. / gpd  
☒ 3 Large---4.1 sq. ft. / gpd  
4 Extra Large---5.0 sq. ft. / gpd

## EFFLUENT/EJECTOR PUMP

- ☒ 1 Not Required  
2 May Be Required  
3 Required  
Specify only if engineered systems  
DOSE \_\_\_\_\_ gallons

3 Section 4G (meter readings)  
ATTACH WATER METER DATA

## LATITUDE AND LONGITUDE

at center of disposal area  
Lat. 44° 27' 41.56N  
Lon. 68° 16' 45.35W  
if g.p.s. state margin of error 10'

## SITE EVALUATOR STATEMENT

I certify that on 07/18/13 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature

STEPHEN H. HOWELL  
Site Evaluator Name Printed

SE #

#213  
(207) 848-5714  
Telephone Number

Date

07/19/13

E-mail Address

S.W. Cole  
for ENG. INC.

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator

Page 1 of 3

HHE-200 Rev. 08/2011

\* NOTE: THE EXISTING DISPOSAL FIELD IS NOT FAILING AS OF 7/18/13. THIS PLAN IS INTENDED ONLY IN THE FUTURE EVENTUALITY OF SYSTEM FAILURE.

Department of Health & Human Services  
Division of Environmental Health  
(207) 287-5672 Fax: (207) 287-3165

Owner's Name

57 GIVE ROAD

JOHN ELLIS

Scale 1" = 50 ft. or as shown

(map from Maine A as recommended)

(SEE ATTACHED  
COPY OF  
TOWN TAX  
MAP)

~~FUNCTIONING AS OF 7/10/13.~~

INSTALL 20' X 57'  
DISPOSAL BED (FOR  
FUTURE USE AS NEEDED)

APPROXIMATE MAXIMUM  
HIGH WATER LINE  
RACCOON CREEK

NOTE:  
EXISTING 4BDR  
HOUSE TO BE DEMOLISHED  
+ REMOVED + REPLACED  
4 A 3BDR

SOIL DESCRIPTION AND CLASSIFICATION Lo a 9' s

Observation Hole TP1 ☒ Test Pit ☐ Boring  
21 " Depth of Organic Horizon Above Mineral Soil

Observation	"	"	"
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

	Texture	Consistency	Color	Mottling
0	VERY FINE SANDY LOAM	FIABLE	BROWN	ABOVE
10	LOAM		BROWNISH	YELLOW
	LOAM		LET. OLIVE	BROWN
20	SILT LOAM	FIRM	OLIVE BROWN	MANY
	TO	TO	TO	DISTINCT
30	SILT CLAY LOAM	V. FIRM	OLIVE	

Limit of  $\alpha_{\text{max}} = 35^\circ$

Text

0

10

20

30

ow Mineral Soil Surface (inches)

11

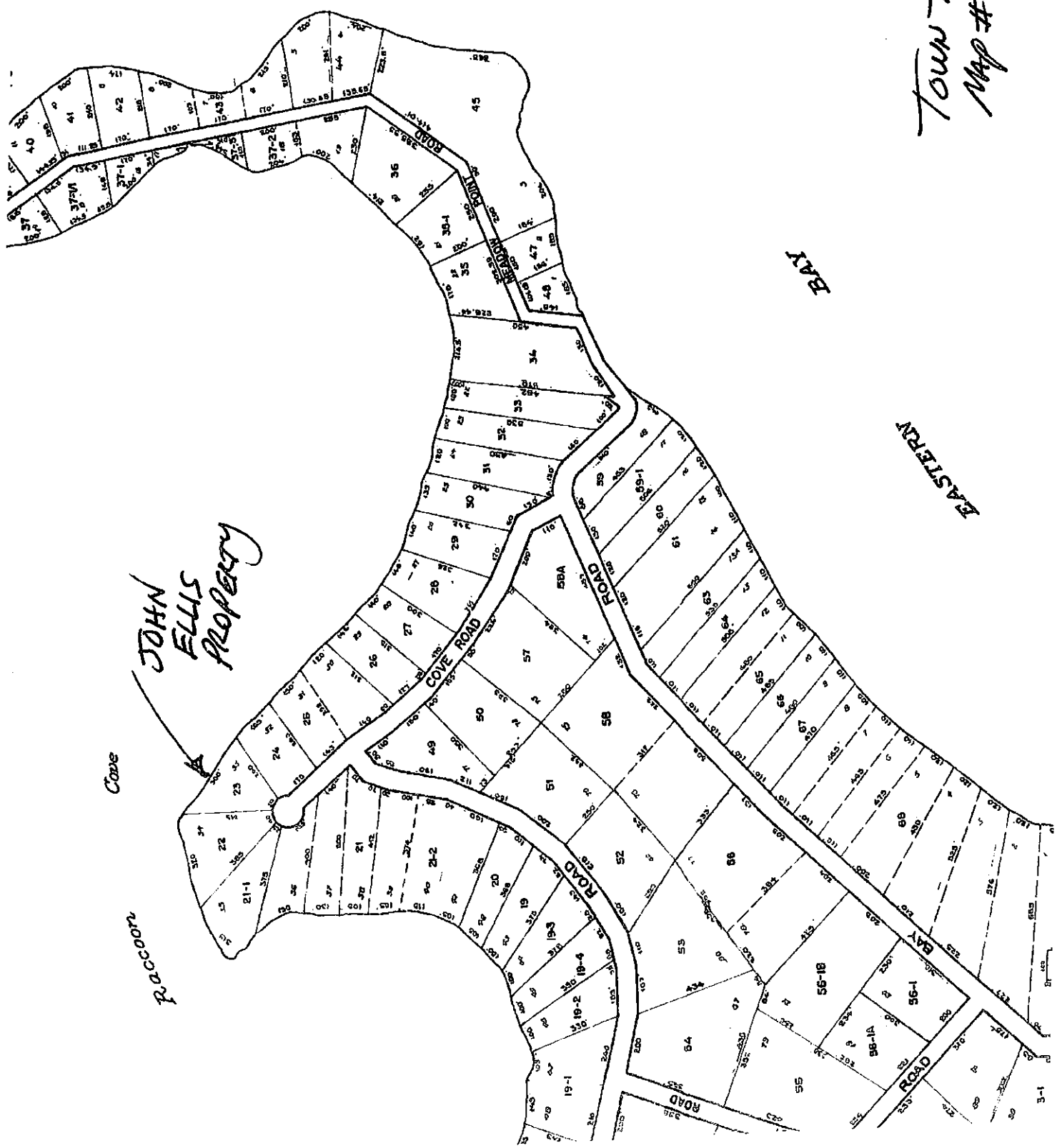
NOTE A:

1. INSTALL SILT FENCE BETWEEN CONSTRUCTION AREA + HIGH WATER LINE PRIOR TO CONSTRUCTION.
2. REVIEW + COMPLY WITH ATTACHED SEPTIC SYSTEM USE NOTES.
3. DIVERT RUNOFF INCLUDING ROOF RUNOFF AWAY FROM DISPOSAL BED.
4. PROPERLY PROTECT ALL PIPES FROM FREEZING + CAUTION.
5. REMOVE EXISTING DISPOSAL FIELD AND ASSOCIATED BACKFILL AND REPLACE WITH CLEAN GRAV. C. SAND BACKFILL.

8 C 1-3 17

# 213 07/19/13

Town Tax Map #14



# SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health & Human Services  
Division of Environmental Health  
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Street, Road, Subdivision

Owner's Name

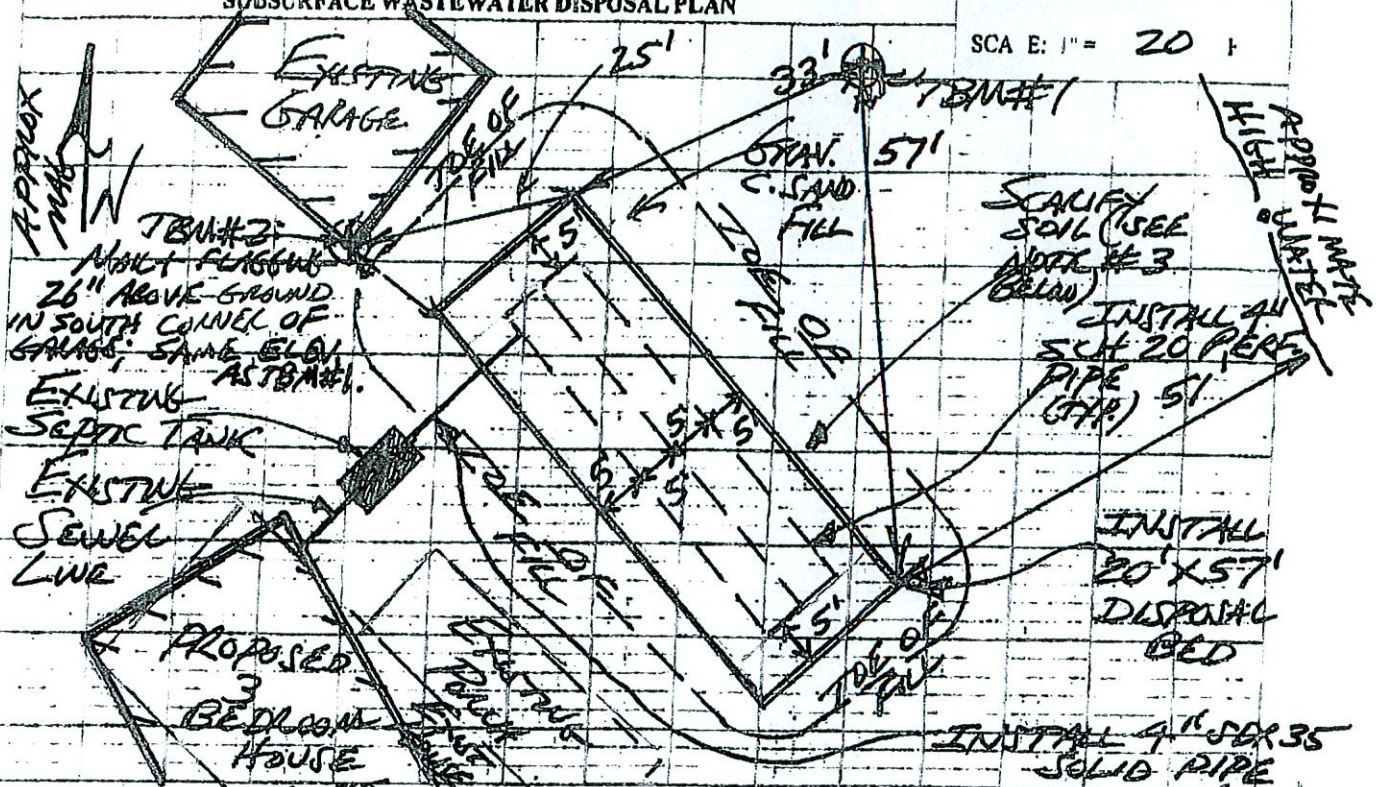
LAMONA

57 COVE ROAD

JOHN ELLIS

## SUBSURFACE WASTEWATER DISPOSAL PLAN

SCA E: 1" = 20'



### FILL REQUIREMENTS X-SECTION

### CONSTRUCTION ELEVATIONS

### ELEVATION ON REFERENCE POINT

Depth of Fill (Upslope) 19" 10'

Shed Grade Elevation

-16"

cal on & Des

Depth of Fill (Downslope) 19" 25'

Top of Distribution Pipe or Prop. entry

-29" 39" up a

Reference Elev. 0'

Bottom of Disposal Area

-40"

Reference Elev. 0'

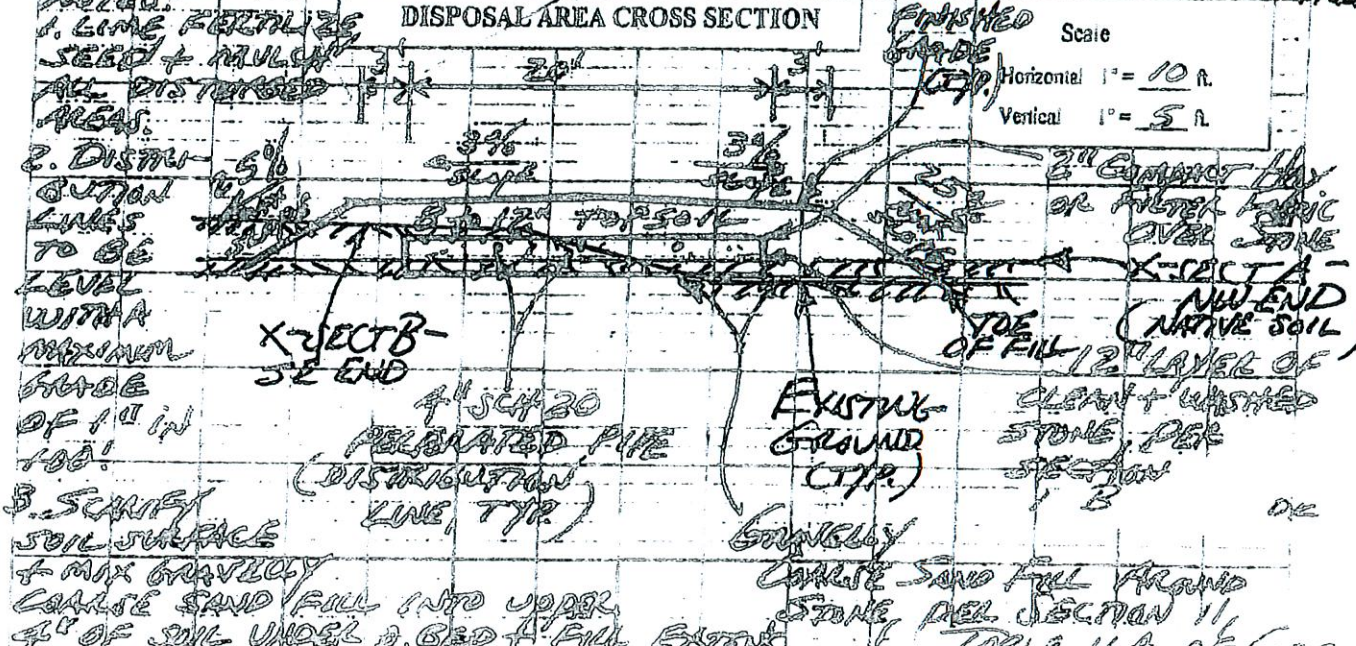
### DISPOSAL AREA CROSS SECTION

FINISHED GRADE (C.P.P.)

Scale

Horizontal 1" = 10'

Vertical 1" = 5'



State Engineer Signature

#213

07/19/13

SE

Date

Page 3 of 3

DHE-200 Rev. 8/1



Department of Health and Human Services  
Maine Center for Disease Control and Prevention  
286 Water Street  
# 11 State House Station  
Augusta, Maine 04333-0011  
Tel: (207) 287-5672  
Fax: (207) 287-4172; TTY: 1-800-606-0215

## SUBSURFACE WASTEWATER DISPOSAL SYSTEM VARIANCE REQUEST

This form must accompany an application (HHE-200 Form) for any subsurface wastewater disposal system which requires a variance to provisions of the Subsurface Wastewater Disposal Rules. The Local Plumbing Inspector must not issue a permit for the installation of a subsurface wastewater disposal system requiring a variance from the Department of Health and Human Services until approval has been received from the Department.

<b>GENERAL INFORMATION</b>		Town of <u>LANOWE</u>
Property Owner's Name: <u>JOHN ELLIS</u>	Tel. No.: _____	
System's Location: <u>57 COVE ROAD</u>		
Property Owner's Address: <u>(SAME)</u>	Zip Code <u>04605</u>	
e-mail address: _____		

The subsurface wastewater disposal system design for the subject property requires a replacement system variance . first time system variance to the Subsurface Wastewater Disposal Rules. This variance requires local approval local and state approval.

<b>SPECIFIC VARIANCE REQUESTED</b> (To be filled in by Site Evaluator. Use additional sheets if needed.)		<b>SECTION OF RULE</b>
1. <u>51' TO NEAR WATER BODY (RACCOON COVE)</u>		<u>TABLE 8A</u>
2. <u>9' TO BUILDING WITHOUT BASEMENT (GARAGE)</u>		<u>TABLE 8A</u>
3. <u>(FROM DISPOSAL BED)</u>		
<b>SITE EVALUATOR</b>		
<p>When a property is found to be unsuitable for subsurface wastewater disposal by a licensed Site Evaluator, the Evaluator shall so inform the property owner. If the property owner, after exploring all other alternatives, wishes to request a variance to the Rules, and the Evaluator in his professional opinion feels the variance request is justified and the site limitations can be overcome, he shall document the soil and site conditions on the Application. The Evaluator shall list the specific variances necessary plus describe below the proposed system design and function. The Evaluator shall further describe how the specific site limitations are to be overcome, and provide any other support documentation as required prior to consideration by the Department. Attach a separate sheet if necessary.</p>		
<p><u>PROPOSED REPLACEMENT SDDDC SYSTEM IS FURTHER AWAY FROM RACCOON COVE THAN EXISTING SYSTEM + SAME DISTANCE FROM GARAGE. THERE IS NO OTHER FEASIBLE LOCATION DUE TO WELL COVER + SOILS.</u></p>		
I, <u>STEPHEN H. HOWELL</u> , S.E., certify that a variance to the Rules is necessary since a system cannot be installed which will completely satisfy all the Rule requirements. In my judgment, the proposed system design on the attached Application is the best alternative available; enhances the potential of the site for subsurface wastewater disposal; and that the system should function properly.		
<u>[Signature]</u> SIGNATURE OF SITE EVALUATOR		<u>07/19/13</u> DATE

<b>PROPERTY OWNER</b>	
I, <u>Michelle Ellis</u> , am the owner agent for the owner of the subject property. I understand that the installation on the Application is not in total compliance with the Rules. Should the proposed system malfunction, I release all concerned provided they have performed their duties in a reasonable and proper manner, and I will promptly notify the Local Plumbing Inspector and make any corrections required by the Rules. By signing the variance request form, I acknowledge permission for representatives of the Department to enter onto the property to perform such duties as may be necessary to evaluate the variance request.	
<u>[Signature]</u> SIGNATURE OF OWNER AGENT FOR THE OWNER	<u>6/9/15</u> DATE

**LOCAL PLUMBING INSPECTOR - Approval at local level**

The local plumbing inspector shall review all variance requests prior to rendering a decision.

I, Michael Smith, the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property. The proposed system ( does does not ) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone. Therefore, I ( do do not ) approve the requested variance. I ( will will not ) issue a permit for the system's installation as proposed by the application.

LPI Signature

Date

**LOCAL PLUMBING INSPECTOR - Referral to the Department**

The local plumbing inspector shall review all variance requests prior to forwarding to the Division of Environmental Health.

I, \_\_\_\_\_, the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property. The proposed system ( does does not ) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone. Therefore, I ( do do not ) recommend the issuance of a permit for the system's installation as proposed by the application.

LPI Signature

Date

**FOR USE BY THE DEPARTMENT ONLY**

The Department has reviewed the variance(s) and ( does does not ) give its approval. Any additional requirements, recommendations, or reasons for the Variance denial, are given in the attached letter.

SIGNATURE OF THE DEPARTMENT

DATE

- Notes: 1. Variances for soil conditions may be approved at the local level as long as the total point assessment is at least the minimum allowed. (See Section 7.B.4 of the Subsurface Wastewater Disposal Rules for Municipal Review.)
2. Variances for other than soil conditions or soil conditions beyond the limit of the LPI's authority are to be submitted to the Department for review. (See Section 7.B.3 for Department Review.) The LPI's signature is required on these variance requests prior to sending them to the Department.

**SOIL, SITE AND ENGINEERING FACTORS FOR FIRST TIME SYSTEM VARIANCE ASSESSMENT  
WITH LIMITING SOIL DRAINAGE CONDITIONS (SEE TABLES 7C THROUGH 7M).**

Soil Profile	CHARACTERISTIC	POINT ASSESSMENT
Depth to Groundwater/Restrictive Layer		
Terrain		
Size of Property		
Waterbody Setback		
Water Supply		
Type of Development		
Disposal Area Adjustment		
Vertical Separation Distance		
Additional Treatment		
TOTAL POINT ASSESSMENT:		

Minimum Points (Check One):    Outside Shoreland Zone-50    Inside Shoreland Zone-65    Subdivision-65

2. Bottom of disposal field: The bottom of each disposal field must be installed at the elevation specified on the permit. It must be maintained to a level grade no greater than 2 inches within 100 feet. Note: The bottom of a disposal field serves as the final stage of the distribution network.
3. Avoid unnecessary compaction: Excavation must be carried out in a manner that will avoid unnecessary compaction of both sidewalls and bottom area. Heavy equipment, especially rubber-tired vehicles such as front-end loaders, should not be driven over the exposed bottom of the disposal field. Excavation should be carried out when possible, by a back-hoe operating from outside the perimeter of the previously excavated portions of the disposal fields.
4. Reopen smeared or compacted bottom or sidewall surfaces: If any portion of the bottom or sidewalls becomes smeared or compacted, that portion must be scarified to reopen soil pores. Roto-tilling may be necessary to reach the limit of compacted soil depth.
5. Weather conditions: Work should be scheduled so that excavated areas are not exposed to rainfall or wind-blown silt. Any loose soil or debris that is washed or otherwise deposited within the excavation must be carefully removed prior to backfilling. Additionally, disposal fields should not be installed in frozen ground or when the ambient air temperature is below freezing, especially if construction will take place over several days.

#### D. CONSTRUCTION

1. Construction: The installer of the system must make certain that the system and all its component parts are installed in conformance with the requirements of these Rules, the plan prepared by the site evaluator, and with any special engineering design requirements approved or required by the Department, pursuant to an approved variance.
2. Soil and backfill material: The installer of the system must make certain that the construction and installation are performed without adversely affecting the capacity of the soil or backfill material to adequately absorb or treat the septic tank effluent.

#### E. BACKFILL PLACEMENT FOR DISPOSAL AREAS INCLUDING FILL EXTENSIONS

1. General: Selection and placement of backfill must comply with the requirements of this Section.
2. Backfill standards: The backfill material must be gravelly coarse sand which meets the requirements of Table 11A or 11(E)(2)(a) below, as approved by the Department or LPI:

TABLE 11A  
Backfill Textural Gradation

Sieve Size	Percent Passing by Weight
3 inches	100
#4	75-100
#10	50-100
#60	10-50
#100	2-20
#200	2-8
Clay Fraction	0-2

- (a) Field determination of backfill: Due to the difficulty of obtaining sieve analyses and the variability of backfill material, the following procedures can be used in the field to determine the suitability of backfill material. The backfill is suitable if the soil texture is loose single grains, the individual sand grains can be readily seen (similar to salt or sugar grains) and felt, and the following conditions are observed: If squeezed in the hand when dry, it will fall apart when the pressure is released but has enough fines to stain the lines in the palm of the hand; or, if squeezed when moist, it will form a cast that will crumble when

## SEPTIC SYSTEM USER NOTES

1. This septic system has been designed to meet requirements of the State of Maine Subsurface Wastewater Disposal Rules, 10-144A CMR 241. Because site evaluators are not notified when local ordinances are enacted which exceed state requirements, it is the septic system owner's responsibility to ensure that this septic system design (HHE-200 form) is in compliance with applicable local ordinances. This can be done by contacting your local plumbing inspector and asking about local ordinances which differ from those required in the Rules.
2. It is the septic system owner's responsibility to obtain any local, state, or federal permit(s) that may be required for the installation of this septic system (work within or adjacent to a wetland may require a state and/or federal permit). Contact the Maine Department of Environmental Protection at 287-2111 and the Army Corps of Engineers at 623-8367 if you have any questions.
3. The use of a garbage grinder on a septic system is not recommended. Depending on use patterns, they can contribute a significant amount of particulate matter and grease to the system. Excessive use may result in premature failure. If a garbage grinder is to be used, additional septic tank capacity, a multi compartment septic tank is required, and/or more frequent septic tank pumping is recommended.
4. For new construction, it is recommended that the septic system owner install low volume toilets (1 1/2 gallons per flush or less) and other flow reducing fixtures such as low volume shower heads and faucets to minimize water consumption. A reduction in water usage will generally result in extended life of your septic system.
5. It is the septic system owner's responsibility to limit water consumption and wastewater generation so that the septic system design capacity (design flow on the HHE-200 form) is not exceeded on any day. Activities which generate large amounts of wastewater should be spread out over several days where possible. Excessive use of a septic system on any day can cause the system to fail even though your use, averaged over a week or month, is below design volume.
6. Do not connect floor or roof drains to a septic system. Your septic system is not designed to handle this water and it will likely cause premature failure.
7. Do not dispose of backwash from water softeners or water treatment devices in your septic system. Large amounts of water can be generated from these devices which can overload a septic system.
8. Do not dispose of any hazardous or toxic substances in a septic system such as paint thinner, paints, varnishes, photographic solutions, pesticides, insecticides, organic solvents or degreasers and drain openers. Septic systems depend on living organisms to function properly. Toxic or hazardous material can, in effect, "kill" the system and are a threat to pollution of surface or groundwater resources. Instead of using a commercial degreaser or drain opener, which can be toxic, use one of the following:
  - A. A plunger or mechanical snake; or
  - B. Pour one handful of baking soda and 1/2 cup of white vinegar down the drainpipe and cover tightly for one minute. Repeat as necessary; or

- C. Pour 1/2 cup salt and 1/2 cup baking soda down the drain followed by 6 cups of boiling water. Let sit for several hours or overnight, then flush with water.
9. Do not dispose of any inert or non-biodegradable substances into your septic system such as disposable diapers, cat box litter, coffee grounds, cigarette filters, sanitary napkins, facial tissues and wet strength paper towels.
  10. Do not dispose of large quantities of fats or grease into your septic system unless an external grease trap has been designed for that purpose. Generally, an internal grease trap is inadequate to handle excessive amounts of grease or fat.
  11. Do not add any septic tank cleaner or additive to your septic system to improve its function or prolong its useful operating life (this includes yeast, horse manure or commercial products). No effective product or material is recognized by State authorities and, in fact, some of these products can actually cause your septic system to fail.
  12. Maintain your septic system by regularly having the septic tank pumped. Some biological breakdown of solids and grease occurs in septic tanks but the rate of accumulation virtually always exceeds the rate of biologic breakdown. If your septic tank is not pumped out often enough, solids and greases may build up to the point where they enter your disposal areas. Once this material reaches the disposal area, it will clog the soil surface and likely cause premature failure.
  13. We recommend having your septic tank pumped or inspected after one year of use. The pumper can advise you of how often you need to have the septic tank pumped based on what he finds at this inspection (typically a septic tank will need to be pumped every two to five years). Keep in mind that you will need to adjust pumping frequency to coincide with changes in the way you use your system. The more your septic system is used, the more frequently that the septic tank should be pumped.
  14. Do not drive over or store heavy materials on any part of your septic system unless it is specifically designed to handle heavy loads. Otherwise, crushed components may be the result and the system may fail.
  15. Divert all surface water away from the septic tank and disposal area. Roof areas which contribute runoff water to the septic system site should have gutters installed to divert that water to another location.
  16. **PLEASE** – If you have any questions about your septic system or how to use it, call me (848-5714) and ask for advice. You can also call the State Agency responsible for regulating septic systems, the plumbing program in the Division of Health Engineering, at 287-5689.